THE VASCULAR FLORA OF FORT SUMTER AND FORT MOULTRIE, SOUTH CAROLINA, U.S.A.

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ABSTRACT

The vascular flora of Fort Moultrie and Fort Sumter, Charleston County, South Carolina, were sampled in 1990, one growing season after Hurricane Hugo, and during the 2008-10 growing seasons. The flora at Fort Moultrie consisted of 303 taxa, while 77 taxa were identified at Fort Sumter. The Asteraceae and Poaceae were the largest families in the flora at both sites. Cyperus (9 taxa at Fort Moultrie, 3 taxa at Fort Sumter) was the largest genus in the flora. The annotated checklist includes the locality and habitat in which each species occurs, the years the taxa were observed, frequency of occurrence, and pertinent synonyms.

RESUMEN

Se muestreó la flora vascular de Fort Moultrie y Fort Sumter, Charleston County, South Carolina, en 1990, una estación después del huracán Hugo, y durante las estaciones de 2008-10. La flora de Fort Moultrie consistió en 303 taxa, mientras que se identificaron 77 taxa en Fort Sumter. Las Asteraceae y Poaceae fueron las mayores familias de la flora en ambos lugares. Cyperus (9 taxa en Fort Moultrie, 3 taxa en Fort Sumter) fue el género más grande de la flora. El catálogo anotado incluye la localidad y el hábitat de cada especie, los años en que los taxa se observaron, la frecuencia de ocurrencia, y los sinónimos pertinentes.

INTRODUCTION

Fort Sumter National Monument in Charleston County, South Carolina, is comprised of Fort Sumter National Monument (32.75N 79.87W), an island in Charleston Harbor, and Fort Moultrie (32.76N 79.86W) on the southern rim of Sullivan's Island north of the harbor (Fig. 1). Two vegetation studies of the sites have occurred in the last twenty-five years. Stalter and Lamont (1993) sampled the vascular plant species of Fort Moultrie and Fort Sumter at six-week intervals during the growing season after Hurricane Hugo from March–October 1990. The combined flora of both sites (ca. 27 ha at Fort Moultrie and ca. 1 ha at Fort Sumter) in 1990 consisted of 63 families, 161 genera and 287 species; 69 species occurred at Fort Sumter, while 218 species occurred at Fort Moultrie. Subsequently, Schmidt (2004) produced an unvouchered, unpublished list of 265 vascular plant species at Fort Moultrie. One-hundred fifty-four of the taxa (58%) reported by Schmidt were also found by Stalter and Lamont (1993), while 52 taxa (19%) were not.

METHODS

Four plant communities were documented at Fort Moultrie and Fort Sumter (Stalter & Lamont 1993). Three occur at both sites (salt marsh, dune and ruderal), while one is exclusive to Fort Moultrie (maritime woodland). The maritime woodland community was not included in the present study as it was destroyed in Hurricane Hugo. Remnants of the flora in this community appeared in the earlier paper by Stalter and Lamont (1993).

The vascular plant species at Fort Moultrie and Fort Sumter were sampled at six-week intervals from April–October 2008–2010. The data was analyzed with previously published data from March-October 1990 (Stalter & Lamont 1993), as well as unpublished data from Schmidt (2004), to better characterize the complete flora at the two sites. The most intensive collecting was during the 1990 growing season, one year after Hurricane Hugo. Objectives for each trip included the collection of voucher material and accumulation of information on habitat preference and abundance for ach species. One complete set of vouchers was deposited at the A. C. Moore Herbarium at the University of South Carolina (USCH). Duplicate vouchers were retained in James

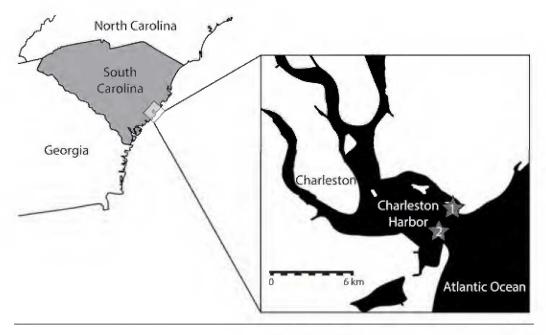


Fig. 1. General map of South Carolina and the Charleston Harbor Area. The locations of Fort Moultrie (1) and Fort Sumter (2) are designated by gray stars.

Montgomery's (ferns) private herbarium while and Gordon Tucker's (Cyperaceae) material is housed at Eastern Illinois University Herbarium (EIU). Accession numbers for taxa collected in the 2008–2010 study and taxa reported exclusively by Schmidt (2004) but not by us are included in the appendix. Because many of Schmidt's exclusive taxa from 2004 are not accessioned, we designate these taxa as "sight record."

The species checklist at both forts contains an inventory of the vascular plant species that reproduce spontaneously and persist for one growing season, including native species, naturalized and adventive weeds, and escapes from cultivation. Plant species collected or identified exclusively by Schmidt (2004) are annotated as such in the checklist. All non-native species are designated using an asterisk (*). Native and non-native status follows that of Gleason and Cronquist (1991) and Wunderlin (1998). The checklist is divided into four categories: Polypodiophyta, Pinophyta, Magnoliophyta: Magnoliopsida, and Magnoliophyta: Liliopsida. Radford et al. (1968) was used as the initial guide for identification, but the names of all taxa were verified using the working draft from 30 November 2012 of the *Flora of the Southern and Mid-Atlantic States* (Weakley 2012). If taxonomy or synonymy was in question, the Integrated Taxonomic Information System (ITIS) and the International Plant Names Index (IPNI) were used for verification. Annotated names reflect currently accepted nomenclature from these sources.

RESULTS

Four plant communities as described by Stalter and Lamont (1993) occur at Fort Moultrie: 1) a large salt marsh community dominated by *Spartina alterniflora* Loisel; 2) a dune community dominated by graminoids and forbs; 3) a ruderal community consisting of lawns, fields, roadsides and thickets; and 4) a maritime woodland. All but the maritime woodland occur at Fort Sumter where a large ruderal, salt marsh and small dune community are present. The ruderal community at both forts supports the greatest number of taxa.

Salt Marsh Community.—The salt marsh community is best developed at Fort Moultrie near the dock. Common species there and at Fort Sumter include Spartina alterniflora, S. patens (Ait.) Muhl., Salicornia depressa Stanl., Sesuvium portulacastrum (L.) L., Borrichia frutescens (L.) DC. and Sporobolus virginicus (L.) Kunth. The distribution of these taxa along an elevation (tidal) and salinity gradient has been well documented previously (Stalter 1973; Baden et al. 1973; Stalter and Lamont, 1993). *Spartina alterniflora*, the most flood tolerant species, occupies the greatest area of salt marsh at both sites.

Dune Community.—Uniola paniculata L. is the dominant species of the primary dune system at Fort Moultrie. At both Fort Moultrie and Fort Sumter, the state rare *Oenothera drummondii* Hook. thrives and is especially conspicuous when in flower. Additional members of the dune community are *Spartina patens* (Ait.) Muhl., *Cakile edentula* (Bigelow) Hook., *Salsola kali* L., *Yucca aloifolia* L., *Strophostyles helvola* (L.) Ell., *Croton punctatus* Jacq., *Euphorbia polygonifolia* L., *Xanthium strumarium* L. and *Cenchrus tribuloides* L. The dune community is poorly developed at Fort Sumter, occupying a small area of land outside the western portion of the fort. At Fort Moultrie an additional species, *Ipomoea imperati* (Vahl) Griseb., thrives on and in front of the primary dune.

Ruderal Community.—The ruderal community was the largest assemblage at Fort Sumter, composed primarily by lawn inside and outside of the park. The lawn was trimmed several times a month from March– November, making it difficult for annuals to become established. Common species included Stenotaphrum secundatum (Walter) Kuntze, Hydrocotyle umbellata L., Medicago arabica (L.) Huds., Sisyrinchium rosulatum Bickn., Sonchus asper (L.) Hill., Oenothera humifusa Nutt. and O. laciniata Hill. Arenaria serpyllifolia L. grows in brick crevices within both forts along with Centella asiatica (L.) Urb., Polycarpon tetraphyllum (L.) L., Pteris vittata L. and Sagina decumbens (Ell.) Torrey & A. Gray. The weedy border of the visitor center at Fort Moultrie harbors Vicia sativa ssp. nigra (L.) Ehrh., V. hirsuta (L.) Gray, Medicago arabica (L.) Huds., M. lupulina L., Hieracium gronovii L., and Sonchus asper (L.) Hill. A small population of Salvia lyrata L. thrives on the southern border of Fort Moultrie's Visitor Center. Additional taxa around Fort Moultrie include Sporobolus indicus (L.) Br., Lantana camara L., Bromus catharticus Vahl, Oenothera speciosa Nutt., O. fruticosa L., and O. drummondii Hook. Oenothera speciosa Nutt. was abundant in the unmowed fields at Fort Moultrie in 1990, but was rare in the often-mowed fields at the fort in 2008–2010. A Florida species, Asparagus densiflorus (Kunth) Jessop., was observed in a thicket bordering the road on the southeastern side of the fort in 2009 and had spread to additional sections of the park by 2011. The species has been previously reported in Beaufort County, South Carolina (Damrel 2009, pers. comm.). Ranunculus muricatus L. was common at Fort Moultrie in the northern portion of the lawn, but not observed in 1990. One additional southern taxa observed by us for the first time at Fort Moultrie was Tillandsia recurvata (L.) L.

Maritime Woodland.—The maritime woodland community occurring exclusively at Fort Moultrie is comprised of Quercus virginiana Mill., Sideroxylon tenax L., Celtis laevigata Willd., Prunus caroliniana (Mill.) Ait. and Juglans cinerea L. Additional woody species are Prunus angustifolia Marshall, Zanthoxylum clava-herculus L., Campsis radicans (L.) Seem, Ilex vomitoria Ait., Ligustrum sinense Lour., and Wisteria sinensis (Sims) DC. Herbaceous plants along the woodland edges include Canna × generalis L.H. Bailey, Verbena brasiliensis Vell., Paspalum floridanum Michx., Coreopsis basalis (A. Dietr.) S.F. Blake, Chaerophyllum tainturieri Hook., and Sorghum halepense (L.) Pers.

The vascular flora at Fort Moultrie consists of 303 taxa in 72 families representing 198 genera (see Table 1). The Asteraceae (51 taxa) and Poaceae (40 taxa) were the largest families in the flora comprising 30% of the taxa sampled. The third largest family was the Cyperaceae with 16 taxa. *Cyperus*, with 9 taxa, was the largest genus in the flora. An annotated list of taxa at Fort Moultrie is provided below, while a summary of the flora is listed in Table 1.

Seventy-five taxa at Moultrie observed by us in 1990 were not reobserved in 2008–2010, including 16 monocots and 59 dicots. Eleven new monocots and 10 new dicots were collected at Fort Moultrie for the first time. Of the 303 taxa observed in our twenty-year study, 96 taxa (32%) either colonized or were extirpated at the site.

The vascular flora at Fort Sumter consisted of 77 taxa in 24 families representing 63 genera (see Table 2). The Poaceae (17 taxa) and Asteraceae (15 taxa) were the largest families comprising 42% of the flora. *Cyperus*, with 3 taxa, was the largest genus in the flora. No other genus had more than two taxa. Taxa at Fort Sumter are listed below in the annotated list, while a summary is provided in Table 2. We observed six new taxa at Fort

	Ferns	Gymnosperms	Dicots	Monocots	Total
Family	2	2	54	14	72
Genus	2	3	145	48	198
Native species	1	3	159	59	223 (73.6%)
Non-native species	1	0	63	17	80 (26.4%)
Total species	2	3	222	76	303

TABLE 1. A summary of the vascular flora of Fort Moultrie, South Carolina.

TABLE 2. A summary of the vascular flora of Fort Sumter, South Carolina.

	Ferns	Gymnosperms	Dicots	Monocots	Total
Family	2	0	18	4	24
Genus	2	0	44	18	64
Native species	1	0	36	14	51 (65.4%)
Non-native species	1	0	17	9	27 (34.6%)
Total species	2	0	53	23	78

Sumter during the 2008–2010 collecting season, including three new species of *Cyperus*. During the twentyyear study, 17 taxa (27%) were identified as colonists or were extirpated. Non-native taxa composed 34.6% of the flora occurring on land within Fort Sumter. The combined vascular flora at Fort Moultrie and Fort Sumter one year after Hurrcane Hugo (1990) consisted of 63 families, 161 genera, and 287 species. Fort Moultrie, the larger of the two sites, supported 218 vascular plant species including one spore plant, three gymnosperms, 185 dicots and 44 monocots. Sixteen fewer taxa were collected at Fort Moultrie during the three-year collecting period from 2008–2010. Sixty-nine species occurred at Fort Sumter in 1990, while 66 species were observed during the collecting period from 2008–2010.

DISCUSSION

Four more monocots were found at Fort Moultrie during the 1990 collecting period than in the three-year collecting period from 2008–2010. The higher number of monocots, immediately after Hurricane Hugo, was most likely due to the lack of mowing, allowing more successional forbs and grasses to thrive.

Two tropical/subtropical species have been identified at Fort Moultrie—*Tillandsia recurvata* and *Asparagus densiflorus*. *Tillandsia recurvata* was observed at the Visitor Center growing on live oak (*Quercus virginiana* Mill.) near the NPS dock. This tree was planted by the NPS and probably originated as landscape material from Florida although no documentation is available. Alan Weakley and Dixie Damrel (pers. comm. 2009) have reported *T. recurvata* as introduced in coastal South Carolina in Beaufort, Jasper, Georgetown, and Charleston counties, brought to South Carolina on nursery stock shipped from Florida, and Carter et al. (2009) report from it similarly in Georgia.

Asparagus densiflorus has also been reported in Beaufort Co., South Carolina, by Daniel C. Payne (Damrel, pers. comm.). Material was collected by Payne at 100 Laurens St., Beaufort, South Carolina, on 6 January 2005, the Shell Convience Store, Lady's Island Shopping Center, Hwy 21, Lady's Island, South Carolina, on 6 January 2006, and as an epiphyte at the entrance to Hampton Plantation Bluffton, South Carolina, 23 December 2006. Although Wunderlin (1998) reported that *A. densiflorus* is common in central Florida and rare northward, the species can survive the cold temperatures of coastal South Carolina winters, as demonstrated in 2008–2009 when temperatures dropped lower than -6°C.

In summary, the number of taxa at both Fort Moultrie and Fort Sumter decreased from 1990 to 2008–2010. Fort Moultrie lost 75 of its original taxa while gaining 21 new colonists. Eleven taxa present at Fort Sumter in 1990 were not observed in the present study; 6 new taxa were observed including three species of *Cyperus*. Schmidt (2004) reported several taxa at Fort Moultrie that were not observed by us during the 1990 and

2008–2010 collecting periods. Since taxa invade and become extirpated at a site from year to year the differences in taxa numbers was expected. Disturbance from Hurrricane Hugo, during September 1989, may have created new open habitats for taxa to colonize, and the absence of mowing the large field between the dunes and Fort Moultire may account for the higher number of taxa identified during the 1990 collecting season.

ANNOTATED CHECKLIST OF SPECIES

The vascular plant taxa have been arranged according to the following categories: vascular cryptograms, gymnosperms, dicots, and monocots. Within each category, families and lower taxa are arranged alphabetically. Asterisks (*) are used to designate non-native taxa. Nomenclature at lower taxonomic levels follows the working draft from 30 November 2012 of the Flora of the Southern and Mid-Atlantic States (Weakley 2012). When taxonomy or synonymy was questioned, ITIS and IPNI were used for verification.

FORT MOULTRIE

POLYPODIOPHYTA

Polypodiaceae

Pleopeltis polypodioides ssp. michauxiana (Weath.) E.G. Andrews & Windham [=Polypodium polypodioides (L.) Watt var. michauxianum Weatherby]. Ruderal—masonry walls: rare. Stalter, 29 Mar 1990.

Pteridaceae

*Pteris vittata L. Ruderal—masonry walls: infreq. Stalter 19479, 2008/10.

PINOPHYTA

Cupressaceae

- Juniperus virginiana var. silicicola (Small) E Murray. [=J. silicicola (Small) Bailey]. Dunes—coastal foredunes and swales: infreq. Stalter, 29 Mar 1990. Stalter 19529, 2008/10.
- Taxodium distichum (L.) Rich. Maritime Woodland—ephemeral ponds: rare. Stalter, 27 Aug 1990. Stalter 19771, 2008/10.

Pinaceae

Pinus taeda L. Maritime Woodland: infreq. Stalter, 29 Mar 1990. Stalter 19530, 2008/10.

MAGNOLIOPHYTA MAGNOLIOPSIDA (DICOTS)

Aizoaceae

Sesuvium portulacastrum (L.) L. Salt Marsh: freq. Stalter, 27 Aug 1990. freq. Stalter 19772, 2008/10.

Amaranthaceae (including Chenopodiaceae)

- *Alternanthera philoxeroides (Mart.) Griseb. Ruderal—roadside ditches and moist waste areas: rare. Stalter 19803, 2008/10.
- Amaranthus cannabinus (L.) Sauer. Salt Marsh: infreq. Stalter, 27 Aug 1990.
- Atriplex mucronata Raf. [=A. arenaria Nutt.]. Dunes: infreq. Stalter, 26 Oct 1990. Stalter 19805, 2008/10.
- Atriplex prostrata Boucher ex DC. [=A. hastata L.]. Salt Marsh and Dunes: freq. Stalter, 27 Aug 1990. Stalter 19804/20254, 2008/10.
- *Chenopodium album L. Ruderal—roadsides and waste places: freq. Stalter 19806, 2008/10.
- *Dysphania ambrosioides (L.) Mosyakin & Clemants. [=Chenopodium ambrosioides L.]. Ruderal—swales, fields and disturbed sands: freq. Stalter, 27 Aug 1990. Stalter 19573, 2008/10.
- Iresine rhizomatosa Standl. Salt Marsh—edges of tidal marshes: infreq. Stalter, 26 Oct 1990.

Salicornia virginica L. Salt Marsh: freq. Stalter 19534, 2008/10.

Salicornia maritima Wolff & Jefferies (synonymy incomplete). Salt Marsh: infreq. Stalter 19807, 2008/10.

- Salsola kali L. Dunes—upper beach: freq. Stalter, 26 Oct 1990. Stalter 19937, 2008/10.
- Suaeda linearis (Ell.) Moq. Salt Marsh: freq. Stalter, 26 Oct 1990.

Anacardiaceae

- Rhus copallinum L. Maritime Woodland—open, dry, waste places and swales: freq. Stalter, 27 Aug 1990. Stalter 19532, 2008/10.
- Toxicodendron radicans var. radicans (L.) Kuntze [=Rhus radicans L.]. Maritime Woodland—shrublands, disturbed sands; freq. 1990, 2008/10. No specimens collected.

Apiaceae

- Centella asiatica (L.) Urb. [=C. erecta (L. f.) Fernald.]. Ruderal—moist fields and other open moist, sandy places: freq. Stalter, 26 Oct 1990.
- *Chaerophyllum tainturieri* Hook. Ruderal—fields and waste places: infreq. to locally freq. Stalter, 29 Mar 1990.
- *Daucus carota L. Ruderal—roadsides and waste places: infreq to locally freq. Stalter, 27 Aug 1990.
- Ptilimnium capillaceum (Michx.) Raf. Ruderal—apparently salt tolerant: infreq to locally freq. Stalter, 29 Mar 1990. Stalter 19938, 2008/10.

Aquifoliaceae

- Ilex opaca Ait. Maritime Woodland: infreq. Stalter, 27 Aug 1990. Stalter 19574, 2008/10.
- Ilex vomitoria Ait. Ruderal and Maritime Woodland—swales, thickets, and fields: freq. Stalter, 29 Mar 1990. Stalter 19575, 2008/10.

Araliaceae

- Hydrocotyle bonariensis Lam. Dunes—moist, open swales: infreq. Stalter, 29 Mar 1990. Stalter 20280, 2008/10.
- Hydrocotyle umbellata L. Dunes—moist, open swales: infreq. Stalter, 29 Mar 1990.
- Hydrocotyle verticillata Thunb. Sight record. Schmidt 2004.

Asteraceae

- *Achillea millefolium L. Ruderal: freq. Stalter, 14 Jun 1990.
- Ambrosia artemisiifolia L. Ruderal: freq. Stalter, 29 Mar 1990. Stalter 19480, 008/10.
- *Artemisia vulgaris L. Ruderal—disturbed site adjacent to the Visitor's Center: rare. Stalter, 14 Jun 1990.
- Baccharis halimifolia L. Salt Marsh: freq. Stalter, 29 Mar 1990. Stalter 19481, 2008/10.
- Bidens bipinnata L. Ruderal: infreq. Stalter 20055, 2008/10.
- Borrichia frutescens (L.) DC. Salt Marsh: freq. Stalter, 27 Aug 1990, Stalter 20056, 2008/10.
- Carphephorus sp. Sight record. Schmidt 2004.
- Cirsium nutallii DC. Ruderal-fields: infreq. Stalter, 27 Aug 1990.

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- Conoclinium coelestinum (L.) DC. [=Eupatorium coelestinum L.]. Ruderal—fields: infreq. Stalter, 26 Oct 1990.
- *Conyza bonariensis (L.) Cronq. [=Erigeron bonariensis L.]. Ruderal—disturbed fields: freq. Stalter, 14 Jun 1990. Stalter 20057, 2008/10.
- Conyza canadensis (L.) Cronq. var. pusilla (Nutt.) Cronq. [=Erigeron canadensis L. var. pusillus (Nutt.) Boivin, non Ahles]. Dunes: freq. Stalter, 26 Oct 1990. Stalter 19484, 2008/10.
- *Coreopsis basalis (A. Dietr.) Blake. Ruderal—disturbed fields: rare. Stalter, 14 Jun 1990.
- Elephantopus nudatus A. Gray. Maritime Woodland: rare. Stalter, 27 Aug 1990.

Elephantopus tomentosus L Sight record. Schmidt 2004.

Erechtites hieracifolius (L.) Raf. ex DC. Ruderal—disturbed fields and waste places: infreq. Stalter, 14 Jun 1990. Stalter 20058, 2008/10.

- Erigeron philadelphicus L var. philadelphicus. Ruderal—fields: infreq. Stalter, 29 Mar 1990; 26 Oct 1990.
- *Erigeron quercifolius* Lam. Ruderal—fields, roadsides, and waste places: freq. Stalter, 29 Mar 1990. Stalter 19486, 2008/10.
- *Erigeron strigosus* Muhl. ex Willd. Ruderal—fields and waste places: freq. Stalter, 29 Mar 1990; 14 Jun 1990.
- *Eupatorium capillifolium* (Lam.) Small. Ruderal—fields and swales: freq. Stalter, 26 Oct 1990. Stalter 20059, 2008/10.
- Euthamia graminifolia (L.) Nutt. [=Solidago microcephala (Greene) Bush]. Ruderal—fields and swales: freq. Stalter, 26 Oct 1990. Stalter 20062, 2008/10.

Gaillardia pulchella Foug. Ruderal—sandy waste places and swales: freq. Stalter, 14 Jun 1990; 26 Oct 1990. Stalter 20063, 2008/10.

Gamochaeta argyrinea G.L. Nesom. GA Acc#237534. Schmidt 2004.

- *Gamochaeta calviceps (Fernald) Cabrera [=G. falcata (Lam.) Cabrera]. Sight record, Schmidt 2004.
- Gamochaeta pensylvanica (Willd.) Cabrera. GA Acc# 237530, GA Acc#237475. Schmidt 2004.
- Gamochaeta purpurea (L.) Cabrera. [=Gnaphalium purpureum L. var. purpureum]. Ruderal—fields lawns, roadsides, and waste places: freq. Stalter 19487, 1990. Stalter 20061, 2008/10.

Heterotheca subaxillaris (Lam.) Britton & Rusby. Ruderal—disturbed sands and waste places: freq. Stalter, 26 Oct 1990. Stalter 19488, 2008/10.

- Hieracium gronovii L. Ruderal—lawns and fields: infreq. Stalter 19489, 2008/10.
- *Hypochaeris chillensis (Kunth) Britton. Ruderal—sandy waste places: rare. Stalter, 29 Mar 1990.
- *Hypochaeris glabra L. Ruderal—lawns, fields, and waste places: infreq. Stalter, 29 Mar 1990. Stalter 19490, 2008/10.

Iva frutescens L. Salt Marsh: freq. Stalter, 29 Mar 1990. Stalter 19491, 2008/10.

- Lactuca canadensis L. Dunes—along seashore: infreq. Stalter, 14 Jun 1990. Stalter 19492, 2008/10.
- Pluchea camphorata (L.) DC. Ruderal—moist soil and ephemeral ponds: freq. Stalter 20281 2008/10.
- Pluchea carolinensis (Jacq.) G. Don. Schmidt 2004. According to Wunderlin (1998) this taxon occupies the southern portion of the Florida penninsula.
- Pluchea odorata var. odorata (L.) Cass. Ruderal—roadside ditch and moist (fresh to brackish) places: infreq to locally freq. Stalter, 27 Aug 1990. Stalter 20253, 2008/10.
- Pseudognaphalium obtusifolium (L.) Hillard & Burtt. Ruderal—fields and swales: freq. Stalter, 29 Mar 1990.
- Pyrrhopappus carolinianus (Walter) DC. Ruderal—fields and waste places: infreq. Stalter, 29 Mar 1990. Stalter 19493, 2008/10.
- *Senecio vulgaris L. Ruderal—lawns and waste places: infreq. Stalter, 14 Jun 1990. Stalter 19494, 2008/10.
- Solidago odora Ait. Ruderal—thickets: infreq. Stalter, 26 Oct 1990.

- Solidago rugosa var. aspera (Ait.) Fernald. Ruderal—fields: infreq. Stalter, 26 Oct 1990. Stalter 20062, 2008/10.
- Solidago mexicana L. Dunes—upper beach and swales: freq. Stalter, 26 Oct 1990. Stalter 20064, 2008/10.
- Solidago stricta Ait. Ruderal—roadside ditch: rare. Stalter, 26 Oct 1990.
- *Sonchus asper (L.) Hill. Ruderal—disturbed sands and waste places: infreq. Stalter, 29 Mar 1990.
- *Sonchus oleraceus L. Ruderal—disturbed sands: rare. Stalter, 14 Jun 1990. Stalter 19495, 2008/10.
- Symphyotrichum dumosum (L.) Nesom var. dumosum [=Aster dumosus L.]. Ruderal—fields: infreq. Stalter, 26 Oct 1990.
- Symphyotrichum pilosum (Gray) Nesom var. pringlei [=Aster pilosus var. demotus Blake]. Ruderal—moist roadsides: infreq. Stalter, 26 Oct 1990.
- Symphyotrichum subulatum (Michx.) Nesom [=Aster subulatus var. subulatus Michx.]. Ruderal—roadside ditches: infreq. to locally freq. Stalter, 26 Oct 1990.
- Symphyotrichum tenuifolium (L.) Nesom [=Aster tenuifolius L.]. Salt Marsh: infreq. to locally freq. Stalter, 26 Oct 1990. Stalter 20065, 2008/10.
- * Taraxacum erythrospermum Andrz. ex Besser. [=Taraxacum laevigatum (Willd.) DC.]. Ruderal—lawns: rare. Stalter, 29 Mar 1990.
- *Taraxacum officinale Weber ex Wigg. Ruderal—lawns and disturbed sites: freq. Stalter 29 Mar 1990. Stalter 19496, 2008/10.
- Xanthium strumarium L. [=X. echinatum Murray]. Dunes: infreq. Stalter 20066, 2008/10.
- *Youngia japonica (L.) DC. [=Crepis japonica (L.) Benth.]. Ruderal disturbed sites: rare. Stalter, 14 Jun 1990.

Bignoniaceae

- Bignonia capreolata L. [=Anisostichus capreolata (L.) Bureau]. Ruderal—thickets: rare. Stalter, 14 Jun 1990.
- Campsis radicans (L.) Seem. ex Bureau. Ruderal—edge of field on trees: rare. Stalter, 14 Jun 1990. Stalter 19535, 2008/10.

Boraginaceae

*Buglossoides arvensis (L.) I.M. Johnst ssp. arvensis. Ruderal—roadsides and sandy fields: infreq. Stalter, 14 Jun 1990.

Brassicaceae

- Cakile edentula (Bigelow) Hook. Dunes—upper beach: freq. Stalter, 29 Mar 1990. Stalter 19596, 2008/10.
- *Cardamine hirsuta L. Ruderal—disturbed sands and roadsides: infreq. Stalter, 29 Mar 1990. Stalter 19537, 2008/10.
- Caradamine pensylvanica Muhl. ex Willd. Ruderal—moist fields and lawns: infreq. Stalter, 29 Mar 1990.
- Descurainia pinnata (Walter) Britton. Ruderal—sandy fields and waste places: freq. Stalter, 29 Mar 1990. Stalter 19575, 2008/10.
- *Lepidium didymum L. Ruderal—fields, roadsides, and disturbed habitats: freq. Stalter, 29 Mar 1990.
- Lepidium virginicum L. ssp. virginicum. Ruderal—disturbed sands, fields, roadsides, and waste places: freq. Stalter, 29 Mar 1990. Stalter 19577, 2008/10.

Cactaceae

- Opuntia ficus-indica (L.) P. Mill. Dunes—swales: rare. Stalter 19538, 2008/10.
- Opuntia humifusa (Raf.) Raf. Dunes—swales and sandy waste places: infreq, but locally abundant. Stalter, 27 Aug 1990. Stalter 19539, 2008/10.
- Opuntia pusilla (Haw.) Nutt. Dunes—swales: rare. Stalter, 27 Aug 1990. Stalter 19540, 2008/10.

Campanulaceae

Triodanis perfoliata (L.) Nieuwl. Ruderal—disturbed sands and waste places: infreq. Stalter, 29 Mar 1990. Stalter 19576, 2008/10.

Cannabaceae

Celtis laevigata Willd. Maritime Woodland—salt marsh border at Visitor's center: infreq. Stalter, 14 Jun 1990. Stalter 19497, 2008/10.

Caprifoliaceae

*Lonicera japonica Thunb. Ruderal—disturbed sands and fields: freq. Stalter, 29 Mar 1990. Stalter 19498, 2008/10.

Caryophyllaceae

- *Arenaria serpyllifolia L. Ruderal—disturbed sands and pavement cracks: rare. Stalter, 29 Mar 1990. Stalter 19499, 2008/10.
- *Cerastium fontanum Baumg. var. vulgare (Hartman) Greuter & Burdet. Sight record. Schmidt 2004.
- *Cerastium glomeratum Thuill. Ruderal—lawns and disturbed sites: freq. Stalter, 29 Mar 1990.
- *Polycarpon tetraphyllum (L.) L. ssp. tetraphyllum. Ruderal—lawns and disturbed sites: rare. Stalter, 29 Mar 1990.
- *Stellaria media (L.) Vill. Ruderal—lawns, fields, and waste places: freq. Stalter, 29 Mar 1990. Stalter 19500, 2008/10.

Cistaceae

Lechea mucronata Raf. GA Acc# 237706. Schmidt 2004.

Convolvulaceae

- Dichondra carolinensis Michx. Ruderal—lawn: rare, only one population seen adjacent to casemate wall. Stalter, 14 Jun 1990. Stalter 19939, 2008/10.
- Ipomoea carnea ssp. fistulosa (Mart. ex Choisy) D. Austin. Schmidt 2004.
- Ipomoea imperati (Vahl) Griseb. [=I. stolonifera (Cirillo) J.F. Gmelin]. Dunes—upper beach: infreq. Stalter, 27 Aug 1990. Stalter 20282, 2008/10.
- Ipomoea lacunosa L. Dunes and Ruderal—waste places: freq. Stalter, 26 Oct 1990. Stalter 19940, 2008/10.
- Ipomoea pandurata (L.) G. Mey. Ruderal—fields: infreq. Stalter, 26 Oct 1990.
- Ipomoea sagittata Poir. Salt Marsh—upper fringe: freq. Stalter, 14 Jun 1990. Stalter 19941, 2008/10.

Cucurbitaceae

- *Citrullus lanatus (Thunb.) Matsum. & Nakai ssp. lanatus. Dunes upper beach: rare. Stalter, 26 Oct 1990.
- Melothria pendula L. Ruderal—swales and fields: infreq. Stalter, 27 Aug 1990. Stalter 19942, 2008/10.

Ebenaceae

Diospyros virginiana L. Ruderal—successonal fields: rare. Stalter, 14 Jun 1990.

Elaeagnaceae

*Elaeagnus pungens Thunb. Ruderal—roadside: rare. Stalter, 29 Mar 1990. Stalter 19541, 2008/10.

Euphorbiaceae

- Acalypha gracilens A. Gray. Ruderal—disturbed sands: infreq. to locally freq.. Stalter 19943, 2008/10.
- Croton glandulosus L. var. septentrionalis Müll. Arg. Ruderal—swales and disturbed sands: freq. Stalter, 14 Jun 1990; 26 Oct 1990. Stalter 20254, 2008/10.
- Croton willdenowii Webster. Schmidt 2004.
- Croton punctatus Jacq. Dunes: infreq. Stalter, 26 Oct 1990. Stalter 19542, 2008/10.
- Euphorbia heterophylla L. Ruderal—disturbed site near fort: rare. Stalter, 26 Oct 1990. Stalter 20255, 2008/10.
- Euphorbia maculata L. [=Chamaesyce maculata (L.) Small]. Ruderal—lawns, roadsides, disturbed places and waste places: freq. Stalter, 14 Jun 1990. Stalter 19543, 2008/10.

- Euphorbia nutans Lag. & Segura [=Chamaesyce nutans (Lag.) Small]. Schmidt 2004.
- Euphorbia polygonifolia L. [=Chamaesyce polygonifolia (L.) Small]. Dunes—upper beaches, foredunes and swales: freq. Stalter, 14 Jun 1990. Stalter 19544, 2008/10.

Fabaceae

- *Aeschynomene indica L. Ruderal—wet roadside ditch: rare. Stalter, 27 Aug 1990.
- Centrosema virginianum (L.) Benth. Ruderal—fields and disturbed sites: freq. Stalter, 27 Aug 1990.
- Chamaecrista fasciculata (Michx.) Greene var. fasciculata [=Cassia fasciculata Michx.]. Ruderal—roadsides and disturbed sands: freq. Stalter, 29 Mar 1990. Stalter 20256, 2008/10.
- Chamaecrista nictitans (L.) Moench var. nictitans [=Cassia nictitans L.]. Ruderal—roadsides and disturbed sands: freq. Stalter, 29 Mar 1990.
- Clitoria mariana L. var. mariana. Ruderal—roadside: rare. Stalter, 27 Aug 1990. Stalter 20257, 2008/10.
- Crotalaria spectabilis Roth. Ruderal—fields and disturbed sites: infreq. Stalter, 27 Aug 1990.
- Desmodium incanum DC. Sight record. Schmidt 2004.
- *Galactia volubilis* (L.) Britton var. *volubilis*. Ruderal—fields and swales: freq. Stalter, 27 Aug 1990. Stalter 20258, 2008/10.
- *Medicago arabica (L.) Huds. Ruderal—fields and disturbed soil: freq. Stalter 19501, 2008/10.
- *Medicago lupulina L. Ruderal—disturbed sands and roadsides: infreq. Stalter, 29 Mar 1990. Stalter 19502, 2008/10.
- *Medicago polymorpha L. Ruderal—lawns, fields, and waste places: infreq. Stalter 19545, 2008/10.
- *Melilotus albus Medik. Ruderal—roadsides and waste places: freq. Stalter, 29 Mar 1990. Stalter 19503, 2008/10.
- *Melilotus officinalis (L.) Pallas. Ruderal—roadsides: infreq. Stalter, 29 Mar 1990.
- Senna obtusifolia (L.) Irwin & Barneby. GA Acc#237795. Schmidt 2004.
- Sesbania punicea (Cav.) Benth. Dunes: freq. Stalter, 27 Aug 1990. Stalter 20259, 2008/10.
- Sesbania vesicaria (Jacq.) Ell. Ruderal—side of path to beach: rare. Stalter 20260, 2008/10.
- Strophostyles helvola (L.) Ell. Dunes—swales and disturbed sands: infreq. Stalter, 26 Aug 1990. Stalter 19504, 2008/10.
- *Trifolium dubium Sibth. Ruderal—lawns and roadsides: freq. Stalter, 14 Jun 1990.
- *Trifolium repens L. Ruderal—lawns: infreq. Stalter, 14 Jun 1990. Stalter 19505, 2008/10.
- *Vicia hirsuta (L.) Gray. Ruderal—fields: rare. Stalter, 29 Mar 1990.
- Vicia sativa L. ssp. nigra (L.) Ehrh. Ruderal—swales and disturbed sands: infreq. Stalter, 29 Mar 1990; visitor center: freq. Stalter 19506, 2008/10.
- *Wisteria sinensis (Sims) DC. Ruderal—border of dune and moist roadside ditch: rare. Stalter, 14 Jun 1990. Stalter 19579, 2008/10.

Fagaceae

- Quercus chapmanii Sarg. GA Acc#237568. Schmidt 2004.
- Quercus geminata Small. GA Acc#237817. Schmidt 2004.
- *Quercus laurifolia* Michx. Maritime Woodland—thickets: infreq. Stalter, 29 Mar 1990, Stalter 19546, 2008/10.
- Quercus nigra L. Maritime Woodland: rare Stalter, 27 Aug 1990.
- *Quercus virginiana* Mill. Maritime Woodland—fields and scattered stations: infreq but widespread. Stalter, 29 Mar 1990. Stalter 19547, 2008/10.

Gentianaceae

Sabatia stellaris Pursh. Salt Marsh: rare. Stalter, 14 Jun 1990; Dunes: infreq. Stalter, 14 Jun 1990. Stalter 19808, 2008/10.

Geraniaceae

Geranium carolinianum L. Ruderal—fields and disturbed sands: freq. Stalter, 29 Mar 1990. Stalter 19548, 2008/10.

Hypericaceae

- Hypericum gentianoides (L.) Britton, Sterns & Poggenb. Ruderal swales and disturbed sands: locally freq. Stalter, 14 Jun 1990.
- Hypericum hypericoides (L.) Crantz. Ruderal—swales: rare. Stalter, 27 Aug 1990. Stalter 19809, 2008/10.

Juglandaceae

*Carya illinoinensis (Wangenh.) Koch. Maritime Woodland—near fort, persistent after cultivation: rare. Stalter, 26 Oct 1990.

Juglans cinerea L. Maritime Woodland: rare. Stalter 19507, 2008/10.

Lamiaceae

- Callicarpa americana L. Ruderal—fields and swales: infreq. Stalter, 26 Oct 1990. Stalter 19578, 2008/10.
- *Lamium amplexicaule L. var. amplexicaule. Ruderal—lawns, fields, waste places: freq. Stalter, 29 Mar 1990. Stalter 19508, 2008/10.
- Salvia lyrata L. Ruderal—only along hedgerow near visitor's center: rare. Stalter, 14 Jun 1990. Stalter 19509, 2008/10.
- *Stachys floridana Shuttlw. ex Benth. Previously identified by Schmidt (2004) as Salvia floridana. Ruderal—field borders: freq. Stalter 19810, 2008/10.
- Stachys hyssopifolia Michx. Ruderal—field: rare. Stalter, 14 Jun 1990. Teucrium canadense L. Maritime Woodland—edge of thickets:
- infreq. Stalter, 26 Oct 1990. Stalter 20269, 2008/10.
- *Vitex agnus-castus L. Ruderal—persistant after cultivation near fort: rare. Stalter, 14 Jun 1990.

Lauraceae

Persea borbonia (L.) Spreng. Maritime Woodland—old stable dunes at maritime forests: rare. Stalter, 29 Mar 1990. Stalter 19510, 2008/10.

Malvaceae

- Hibiscus moscheutos L. Dunes—ephemeral ponds: infreq. Stalter 19811, 2008/10.
- Kosteletzkya pentacarpos (L.) Ledeb. Dunes—ephemoral ponds: infreq. Stalter 19812, 2008/10.
- Sida rhombifolia L. var. rhombifolia. Ruderal—field: rare. Stalter, 26 Oct 1990. Stalter 19813, 2008/10.

Meliaceae

*Melia azedarach L. Ruderal—fields and roadsides; persistent after cultivation: infreg. Stalter, 29 Mar 1990. Stalter 19549, 2008/10.

Molluginaceae

*Mollugo verticillata L. Ruderal—roadsides and waste places: freq. Stalter, 14 Jun 1990. Stalter 19774, 2008/10.

Moraceae

- *Morus alba L. Ruderal and Maritime Woodland—fields: rare. Stalter, 29 Mar 1990. Stalter 19550, 2008/10.
- Morus rubra L. Maritime Woodland—thickets: rare. Stalter, 14 Jun 1990. Stalter 19551, 2008/10.

Myricaceae

Morella cerifera (L.) Small. Ruderal and Maritime Woodland—swales and edges of fields: infreq. Stalter, 29 Mar 1990. Stalter 19580, 2008/10.

Nyctaginaceae

Boerhavia erecta L. Ruderal—sands: infreq. Stalter 19944, 2008/10.

Oleaceae

*Ligustrum japonicum Thunb. Ruderal and Maritime Woodland escaped from cultivation near old battery: rare. Stalter, 29 Mar 1990, Stalter 19581/19814, 2008/10. *Ligustrum sinense Lour. Ruderal and Maritime Woodland—escaped from cultivation near old battery: infreq. Stalter, 29 Mar 1990. Stalter 19552, 2008/10.

Onagraceae

- Ludwigia maritima R.M. Harper. Ruderal—moist roadside ditch: infreq. Stalter, 29 Mar 1990. Stalter 19815, 2008/10.
- Oenothera biennis L. Dunes: rare. Stalter, 27 Aug 1990. Stalter 19816/19945, 2008/10.
- Oenothera drummondii Hook. ssp. drummondii. Dunes: freq. but rare in the Carolinas (Radford et al. 1968). Stalter, 29 Mar 1990. Stalter 19817, 2008/10.
- Oenothera fruticosa L. Sight record. Schmidt 2004.
- Oenothera humifusa Nutt. Dunes: infreq. Stalter, 27 Aug 1990.
- Oenothera laciniata Hill. Ruderal—disturbed sands and fields: freq. Stalter, 29 Mar 1990. Stalter 19818, 2008/10.
- *Oenothera speciosa Nutt. Ruderal—fields: infreq. to locally freq. Stalter, 29 Mar 1990. Stalter 19775, 2008/10.

Oxalidaceae

- Oxalis articulata Savigny [=O. rubra A. St.-Hil.]. Ruderal—fields: freq. Stalter, 29 Mar 1990. Stalter 19512, 2008/10.
- Oxalis dillenii Jacq. Ruderal—disturbed sands and waste places: infreq. Stalter, 29 Mar 1990. Stalter 19511, 2008/10.

Phytolaccaceae

Phytolacca americana L. Ruderal—swales and disturbed fields: infreq. Stalter, 29 Mar 1990. Stalter 19513, 2008/10.

Pittosporaceae

*Pittosporum tobira (Thunb.) Ait. Ruderal—persistent after cultivation. Stalter 19581, 2008/10.

Plantaginaceae

- Nuttallanthus canadensis (L.) D.A. Sutton [=Linaria canadensis (L.) Dum. Cors.]. Ruderal—swales, disturbed sands, and waste places: freq. Stalter, 29 Mar 1990. Stalter 19553, 2008/10.
- *Plantago aristata Michx. Ruderal—sandy waste places, roadsides, fields, and lawns: freq. Stalter, 29 Mar 1990; 14 Jun 1990.
- *Plantago lanceolata L. Ruderal—disturbed fields and lawns: freq. Stalter, 29 Mar 1990. Stalter 19554, 2008/10.
- Plantago major L. Ruderal—disturbed fields and lawns: rare. Stalter, 14 Jun 1990. Stalter 19555, 2008/10.
- Plantago virginica L. Ruderal—lawns: rare. Stalter, 29 Mar 1990. Stalter 19556, 2008/10.
- *Veronica arvensis L. Ruderal—lawns and waste places: freq. Stalter, 29 Mar 1990. Stalter 19557, 2008/10.
- Veronica peregrina L. Ruderal—moist fields: infreq. Stalter, 29 Mar 1990. Stalter 19558, 2008/10.

Polemoniaceae

*Phlox drummondii Hook. Ruderal and Dunes—swales and disturbed sands: infreq. Stalter, 14 Jun 1990. Stalter 19777, 2008/10.

Polygonaceae

*Persicaria maculosa S.F. Gray [=Polygonum persicaria L.]. Ruderal disturbed moist fields: infreq. Stalter, 14 Jun 1990.

Persicaria punctata (Ell.) Small [=Polygonum punctatum Ell.]. Ruderal—fields: infreq. Stalter, 14 Jun 1990. Stalter 19776, 2008/10.

- Persicaria virginiana (L.) Gaertn. [=Polygonum virginianum L.]. Ruderal—moist roadside ditch: rare. Stalter, 27 Aug 1990.
- Rumex conglomeratus Murray. Ruderal—seen only at one moist field: rare. Stalter, 27 Aug 1990.
- *Rumex crispus L. ssp. crispus. Ruderal—waste places and fields: infreq. Stalter, 29 Mar 1990. Stalter 19582, 2008/10.
- Rumex hastatulus Baldwin. Ruderal—disturbed sands and fields: infreq. Stalter, 29 Mar 1990. Stalter 19583, 2008/10.

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Rumex verticillatus L. Ruderal—moist roadside ditch: rare. Stalter, 27 Aug 1990.

Portulacaceae

- *Portulaca oleracea L. Ruderal—disturbed sands, seen only at Visitor's Center: rare. Stalter, 14 Jun 1990. Stalter 19584, 2008/10.
- *Portulaca pilosa L. Ruderal—dry sandy fields: rare. Stalter, 14 Jun 1990. Stalter 19585, 2008/10.

Rananculaceae

Ranunculus muricatus L. Ruderal—fields: freq. Stalter 19559, 2008/10.

Rosaceae

- Prunus angustifolia Marshall. Dunes: rare. Stalter, 14 Jun 1990. Stalter 19515, 2008/10.
- Prunus caroliniana (Mill.) Ait. Maritime Woodland—edge of swales: infreq. Stalter, 29 Mar 1990. Stalter 19516, 2008/10.
- Prunus serotina Ehrh. var. serotina. Maritime Woodland—swales and fields: infreq. Stalter, 29 Mar 1990. Stalter 19517, 2008/10.
- Rubus pensilvanicus Poir. [=R. argutus Link]. Ruderal and Dunes swales and disturbed sands: infreq. Stalter, 29 Mar 1990.
- Rubus trivialis Michx. Ruderal and Dunes—swales and fields: freq. Stalter, 29 Mar 1990. Stalter 19819, 2008/10.

Rubiaceae

- Diodia teres Walter. Ruderal—swales and disturbed sands: freq. Stalter, 14 Jun 1990; 26 Oct 1990. Stalter 19820, 2008/10.
- Diodia virginiana L. Ruderal—moist roadside ditch and moist field: infreq. Stalter, 14 Jun 1990. Stalter 19821, 2008/10.
- Galium tinctorium (L.) Scopoli var. tinctorium. Ruderal—moist field: rare. Stalter, 27 Aug 1990.

Oldenlandia uniflora L. Ruderal—fields: rare. Stalter, 14 Jun 1990.

*Richardia scabra L. Ruderal—waste places: rare. Stalter, 27 Aug 1990.

Rutaceae

Zanthoxylum clava-herculis L. Dunes—swales: infreq. Stalter, 29 Mar 1990. Stalter 19513, 2008/10.

Salicaceae

- *Populus alba L. Ruderal—waste places: infreq. Stalter, 29 Mar 1990. Stalter 19514, 2008/10.
- Populus heterophylla L. Ruderal—moist field: rare. Stalter, 29 Mar 1990.

Sapotaceae

- Sideroxylon lycioides L. [Bumelia lycioides (L.) Pers.]. Maritime Woodland—swales: rare. Stalter, 29 Mar 1990. Stalter 19560, 2008/10.
- Sideroxylon tenax L. [=Bumelia tenax (L.) Willd.]. Maritime Woodland—thickets and woodland: infreq. Stalter, 27 Aug 1990. Stalter 19561, 2008/10.

Solanaceae

- Physalis walteri Nutt. [=P. viscosa ssp. maritima (M. A. Curtis) Waterf.]. Dunes—swales and dunes: infreq. Stalter, 14 Jun 1990. Stalter 19823, 2008/10.
- Solanum americanum Mill. [=S. nigrum var. virginicum L.]. Ruderal disturbed sands near margin of salt marsh: rare. Stalter, 29 Mar 1990. Stalter 19822, 2008/10.
- Solanum carolinense L. Ruderal—swales and disturbed sands: infreq. Stalter, 14 Jun 1990.
- Solanum rostratum Dunal. Ruderal—disturbed fields: infreq. Stalter, 27 Aug 1990.

Tamaricaceae

*Tamarix gallica L. Salt Marsh—seen only at border between salt marsh and uplands: rare. Stalter, 29 Mar 1990. Stalter 20283, 2008/10.

Tetrachondraceae (previously in Buddlejaceae)

Polypremum procumbens L. Ruderal—dry sandy soil: freq. Stalter, 14 Jun 1990. Stalter 19518, 2008/10.

Verbenaceae

- *Lantana camara L. Ruderal—escaped from cultivation at field near fort: rare. Stalter, 29 Mar 1990. Stalter 19519, 2008/10.
- Phyla nodiflora (L.) Greene. Ruderal—moist disturbed sands: infreq. to locally freq. Stalter, 14 Jun 1990. Stalter 19946, 2008/10.
- *Verbena bonariensis L. Ruderal—edge of fields: freq. Stalter, 14 Jun 1990. Stalter 19947, 2008/10.
- *Verbena brasiliensis Vell. Ruderal—fields: infreq. Stalter, 14 Jun 1990. Stalter 19948, 2008/10.

Vitaceae

- Ampelopsis arborea (L.) Koehne. Ruderal—swales: infreq. Stalter, 29 Mar 1990. Stalter 19562, 2008/10.
- Parthenocissus quinquefolia (L.) Planch. Maritime Woodland swales, thicket: infreq. Stalter, 29 Mar 1990. Stalter 19563, 2008/10.
- Vitis aestivalis Michx. Maritime Woodland: infreq. Stalter, 29 Mar 1990. Stalter 19564, 2008/10.

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Agavaceae

- *Yucca aloifolia L. Dunes—swales: infreq. Stalter, 29 Mar 1990. Stalter 19825, 2008/10.
- Yucca filamentosa L. Dunes—protected dunes and dry sands: infreq. Stalter, 29 Mar 1990. Stalter 19826, 2008/10.

Amaryllidaceae

- *Nothoscordum bivalve (L.) Britton. Ruderal—fields: rare. Stalter, 29 Mar 1990.
- Zephyranthes atamasco (L.) Herb. Ruderal—lawn in front of fort: infreq. Stalter, 14 Jun 1990. Stalter 19520, 2008/10.

Arecaceae

Sabal palmetto (Walter) Lodd. ex Schult. & Schult. Maritime Woodland—swales: infreq. Stalter, 29 Mar 1990. Stalter 19586, 2008/10.

Asparagaceae

- *Asparagus aethiopicus L. [=A. densiflorus (Kunth) Jessop]. Ruderal roadsides: rare. Stalter 19587, 2008/10.
- *Asparagus officinalis L. Ruderal—roadsides and waste places: infreq. Stalter, 14 Jun 1990; 26 Oct 1990. Stalter 19588, 2008/10.

Bromeliaceae

- Tillandsia recurvata (L.) L. Maritime Woodland—epiphyte on Q. virginiana: rare. Stalter 19521, 2008/10.
- Tillandsia usneoides (L.) L. Maritime Woodland—epiphyte on Q. virginiana: infreq. Stalter, 29 Mar 1990.

Cannaceae

*Canna × generalis L.H. Bailey (pro. sp.) [=C. glauca × indica]. Ruderal—persistent after cultivation near fort; entrance to path to beach: locally abundant. Stalter, 14 Jun 1990. Stalter 19827, 2008/10.

Commelinaceae

- *Commelina communis L. Ruderal—roadside ditch: locally abundant. Stalter 19949, 2008/10.
- *Tradescantia ohiensis* Raf. Ruderal—swales and fields: infreq. Stalter, 29 Mar 1990. Stalter 19589, 2008/10.

Cyperaceae

Bolboschoenus robustus (Pursh) Soják. [=Scirpus robustus Pursh]. Salt Marsh: rare. Stalter, 14 Jun 1990.

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- Carex longii Mack. Ruderal—field edges: rare. Stalter, 14 Jun 1990. Stalter 19950, 2008/10.
- Cyperus croceus Vahl. [=C. globulosus Aubl.]. Ruderal—sandy fields: rare. Stalter, 26 Oct 1990.
- Cyperus echinatus (L.) Wood. [=Cyperus ovularis (Michx.) Torr.]. Ruderal—fields: rare. 26 Oct 1990.
- Cyperus esculentus L. var. leptostachyus Boeck. Salt Marsh—swales: infreq to locally freq. Stalter, 26 Oct 1990. Stalter 19829, 2008/10.
- Cyperus filicinus Vahl. Ruderal—moist soil: infreq. Stalter 19830, 2008/10.
- Cyperus odoratus L. Ruderal—moist soil: infreq. Stalter 19831, 2008/10.
- Cyperus pseudovegetus Steud. Ruderal—ditch bordering road: infreq. Stalter 19834, 2008/10.
- Cyperus retrorsus Chapm. Ruderal—moist soil: infreq. Stalter, 26 Oct 1990. Stalter 19832, 2008/10.
- Cyperus strigosus L. Ruderal—moist soil: infreq. Stalter, 27 Aug 1990. Stalter 19833, 2008/10.
- Cyperus surinamensis Rottb. Sight record. Schmidt 2004.
- Eleocharis elliptica Kunth. Ruderal—moist depressions: infreq. Stalter 19951, 2008/10.
- Eleocharis flavescens (Poir.) Urban. Ruderal—moist edge of roadside ditch: rare. Stalter, 29 Mar 1990; 14 Jun 1990.
- Fimbristylis castanea (Michx.) Vahl. Dunes—interdunal depressions; infreq. Stalter 19835, 2008/10.
- Fimbristylis puberula (Michx.) Vahl. var. puberula [=F. spadicea (L.) Vahl.]. Salt Marsh—transition zone between salt marsh and uplands: infreq. Stalter, 26 Oct 1990. Stalter 19836, 2008/10.
- Kyllinga brevifolia Rottb. [=Cyperus brevifolius (Rottb.) Endl. ex Hassk.]. Schmidt 2004.

Juncaceae

Juncus roemerianus Scheele. Salt Marsh—brackish upper of tidal marshes: infreq. to locally freq. Stalter, 14 Jun 1990. Stalter 19522, 2008/10.

Iridaceae

Sisyrinchium rosulatum Bickn. Ruderal—lawns: freq. Stalter 19523, 2008/10.

Liliaceae

- *Allium vineale L. Ruderal—lawns and fields. Stalter, 29 Mar 1990. Stalter 19524, 2008/10.
- *Ornithogalum umbellatum L. Ruderal—lawns and waste places: infreq. Stalter, 29 Mar 1990. Stalter 19525, 2008/10.

Poaceae

- Andropogon glomeratus (Walter) Britton, Sterns & Poggenb. Ruderal—moist sands and old dunes: infreq. Stalter, 26 Oct 1990. Stalter 19837, 2008/10.
- Andropogon gyrans Ashe [=Andropogon elliotii Chapm.]. Ruderal swales: infreq. 26 Oct 1990. Schmidt 2004.
- Andropogon ternarius Michx, var. ternarius. Ruderal—fields and old dunes: infreq. Stalter, 26 Oct 1990.
- Andropogon virginicus L. var. virginicus. Ruderal—swales, fields and roadsides: freq. Stalter, 26 Oct 1990. Stalter 19838, 2008/10.
- *Arundo donax L. Ruderal—border of visitor center parking lot: rare. Stalter 19839, 2008/10.
- Briza minor L. Ruderal—disturbed sands: infreq. Stalter, 29 Mar 1990. Stalter 19565, 2008/10.
- *Bromus catharticus Vahl. var. catharticus [=B. wildenowii Kunth.]. Ruderal—roadsides: rare. Stalter, 29 Mar 1990.
- Cenchrus longispinus (Hack.) Fernald. Ruderal—sandy fields and waste places: infreq. Stalter, 26 Oct 1990. Stalter 19778, 2008/10.

- Cenchrus tribuloides L. Dunes—swales: freq. Stalter, 26 Oct 1990. Stalter 19779, 2008/10.
- Chasmanthium laxum (L.) Yates [=Uniola laxa (L.) Britton, Sterns & Poggenb.]. Ruderal—moist, sandy fields: infreq. Stalter, 29 Mar 1990.
- *Cynodon dactylon (L.) Pers. Ruderal—lawns, fields, roadsides and disturbed sites: freq. Stalter, 14 Jun 1990. Stalter 19566, 2008/10.
- Dichanthelium acuminatum (Sw.) Gould & Clark var. acuminatum [=Panicum lanuginosum Ell.]. Ruderal—fields: freq. Stalter, 14 Jun 1990.

Dichanthelium commutatum (Schult.) Gould var. commutatum. [=Panicum commutatum Schult.]. Sight record. Schmidt 2004.

Dichanthelium scabriusculum (Ell.) Gould & C.A. Clark. Schmidt 2004. *Digitaria sanguinalis (L.) Scop. Ruderal—roadsides, lawns and

- disturbed sites: freq. Stalter, 26 Otober 1990. Stalter 19780, 2008/10.
- Digitaria violascens Link. Ruderal—sandy roadside: rare. Stalter, 26 Oct 1990.
- Distichlis spicata (L.) Greene. Salt Marsh: freq. Stalter, 26 Oct 1990. Stalter 19781, 2008/10.
- *Eleusine indica (L.) Gaertn. Ruderal—roadsides and disturbed sites: infreq. Stalter, 29 Mar 1990; 14 Jun 1990. Stalter 19782, 2008/10.
- *Elymus virginicus* L. var. *halophilus* (Bickn.)Wieg. Salt Marsh—upland borders of brackish water and salt marshes: infreq. Stalter, 29 Mar 1990; 14 Jun 1990. Stalter 19840, 2008/10.
- Eustachys petraea (Sw.) Desv. [=Chloris petraea Sw.]. Ruderal swales: rare. Stalter, 26 Oct 1990.
- *Lolium perenne L. var. aristatum. Ruderal—fields and lawns: infreq. Stalter, 14 Jun 1990. Stalter 19783, 2008/10.
- Muhlenbergia capillaris (Lam.) Trin. Dunes: infreq. Stalter 19841, 2008/10.
- Muhlenbergia expansa (Poir.) Trinius [=M. capillaris var. trichopodes (Ell.) Vasey]. Sight record. Schmidt 2004.
- Panicum amarum Ell. Dunes: freq. Stalter, 26 Oct 1990. Stalter 19842, 2008/10.
- Panicum dichotomiflorum Michx. Ruderal—moist roadside depressions and borders of marshes: infreq. Stalter, 26 Oct 1990.
- *Paspalum dilatatum Poir. ssp. dilatatum. Ruderal—roadsides and waste places: freq. Stalter, 14 Jun 1990; 26 Oct 1990. Stalter 19845, 2008/10.
- Paspalum floridanum Michx. Ruderal—fields: infreq. Stalter 19843, 2008/10.
- Paspalum notatum Flügge. Ruderal—lawns, fields, and waste places: freq. Stalter, 26 Oct 1990. Stalter 19844, 2008/10.
- *Poa annua L. Ruderal—lawns, roadsides and disturbed sands: freq. Stalter, 29 Mar 1990. Stalter 19526, 2008/10.
- Setaria corrugata (Ell.) Schult. Ruderal—fields: freq. Stalter, 27 Aug 1990.
- Sorghum halepense (L.) Pers. Ruderal—disturbed sites, ditches: freq. Stalter, 26 Oct 1990. Stalter 19846, 2008/10.
- Spartina alterniflora Loisel. Salt Marsh: freq. Stalter, 26 Oct 1990. Stalter 19848, 2008/10.
- Spartina patens (Ait.) Muhl. Dunes: infreq. Stalter, 29 Mar 1990; 26 Oct 1990. Stalter 19847, 2008/10.
- Sphenopholis nitida (Biehler) Scribn. Sight record. Schmidt 2004.
- *Sporobolus indicus (L.) R. Brown. [=S. poiretii (Roem. & Schult.) Hitchc.]. Ruderal—lawns and fields: freq. Stalter, 27 Aug 1990. Stalter 19955, 2008/10.
- Sporobolus virginicus (L.) Kunth. Salt Marsh: infreq. to locally freq. Stalter, 14 Jun 1990. Stalter 19849, 2008/10.
- Stenotaphrum secundatum (Walter) Kuntze. Ruderal—moist field: infreq. Stalter, 26 Oct 1990.
- Triplasis purpurea (Walter) Chapm. var. purpurea. Dunes-interdu-

nal swales and dry sandflats: freq. Stalter, 26 Oct 1990. Stalter 19850, 2008/10.

- Uniola paniculata L. Dunes: freq. Stalter, 26 Oct 1990. Stalter 19851, 2008/10.
- Vulpia octoflora (Walter) Rydb. var. octoflora [=Festuca octoflora Walter]. Ruderal—lawns and disturbed sands: infreq. Stalter, 14 Jun 1990. Stalter 19956. 2008/10.

Smilacaceae

Smilax auriculata Walter. Dunes: rare. Stalter, 26 Oct 1990. Stalter 19527, 2008/10.

FURI SUN

POLYPODIOPHYTA

Polypodiaceae

Pleopeltis polypodioides ssp. michauxiana (Weath.) E.G. Andrews & Windham [=Polypodium polypodioides (L.) Watt var. michauxianum Weatherby]. Ruderal—masonry walls: rare. Stalter, 14 Jun 1990.

Pteridaceae

*Pteris vittata L. Ruderal—masonry walls: infreq. Stalter 19567, 2008/10.

MAGNOLIOPHYTA MAGNOLIOPSIDA (DICOTS)

Aizoaceae

Sesuvium portulacastrum (L.) L. Salt Marsh: freq. Stalter, 14 Jun 1990. Stalter 19568, 2008/10.

Amaranthaceae

- Atriplex mucronata Raf. [=A. arenaria Nutt.]. Dunes—upper beach and dunes: infreq. Stalter, 14 Jun 1990. Stalter 19786, 2008/10.
- *Dysphania ambrosioides (L.) Mosyakin & Clemants. [=Chenopodium ambrosioides L.]. Dunes—upper beach: freq. Stalter, 14 Jun 1990. Stalter 19801, 2008/10.
- Salicornia virginica L. Salt Marsh: freq. Stalter 19590, 2008/10.
- Salsola kali L. Dunes—upper beach: freq. Stalter, 14 Jun 1990. Stalter 19785, 2008/10.
- Suaeda linearis (Ell.) Moq. Salt Marsh: freq. Stalter, 14 Jun 1990.

Asteraceae

- *Achillea millefolium L. Ruderal—disturbed sand outside fort: freq. Stalter, 29 Mar 1990.
- Baccharis halimifolia L. Salt Marsh—border: rare. Stalter, 14 Jun 1990; 26 Oct. Stalter 19591, 2008/10.
- Borrichia frutescens (L.) DC. Salt Marsh: freq. Stalter, 14 Jun 1990. Stalter 19592, 2008/10.
- *Conyza bonariensis (L.) Cronq. [=Erigeron bonariensis L.]. Ruderal disturbed soil outside fort: freq. Stalter, 14 Jun 1990. Stalter 19800, 2008/10.
- Conyza canadensis (L.) Cronq. var. pusilla (Nutt.) Cronq. [=Erigeron canadensis L. var. pusillus (Nutt.) Boivin, non Ahles]. Ruderal disturbed soil ourside fort: freq. Stalter, 14 Jun 1990. Stalter 20157, 2008/10.
- Erigeron quercifolius Lam. Ruderal—lawn: freq. Stalter, 29 Mar 1990. Stalter 20158, 2008/10.
- Euthamia graminifolia (L.) Nutt. [=Solidago microcephala (Greene) Bush]. Dunes: rare. Stalter, 26 Oct 1990. Stalter 19853, 2008/10.
- Gamochaeta pensylvanica (Willd.) Cabrera [=Gnaphalium purpureum var. spathulatum (Lam.) Ahles]. Ruderal—lawn: rare. Stalter, 14 Jun 1990.
- Gamochaeta purpurea (L.) Cabrera. [=Gnaphalium purpureum L. var. purpureum]. Ruderal—lawn: freq. Stalter, 29 Mar 1990; 14 Jun 1990. Stalter 19854, 2008/10.

- Smilax bona-nox L. Maritime Woodland—successional shrublands and swales: freq. Stalter, 26 Oct 1990. Stalter 19528, 2008/10.
- Smilax laurifolia L. Maritime Woodland—thickets: rare. Stalter, 29 Mar 1990.

Typhaceae

Typha latifolia L. Ruderal—wet roadside ditch: rare. Stalter, 26 Oct 1990; ephemeral wet depressions: infreq. Stalter 19784, 2008/10.

FORT SUMTER

- Heterotheca subaxillaris (Lam.) Britton & Rusby. Dunes: freq. Stalter, 26 Oct 1990. Stalter 19855, 2008/10.
- *lva imbricata* Walter. Dunes: infreq. Stalter, 26 Oct 1990. Stalter 20159, 2008/10.
- Solidago mexicana L. [=S. sempervirens ssp. mexicana (L.) Semple]. Dunes—upper beach and dune: freq. Stalter, 26 Oct 1990. Stalter 20160, 2008/10.
- *Sonchus asper (L) Hill. Ruderal—disturbed soil and lawn: infreq. Stalter, 29 Mar 1990.
- *Sonchus oleraceus L. Ruderal—disturbed soil: rare. Stalter, 29 Mar 1990. Stalter 19594, 2008/10.
- *Taraxacum officinale Weber ex Wigg. Ruderal—lawns and disturbed sites: freq. Stalter, 29 Mar 1990. Stalter 19595, 2008/10.

Brassicaceae

- Cakile edentula (Bigelow) Hook. Dunes—upper beach: freq. Stalter, 29 Mar 1990. Stalter 19857, 2008/10.
- Descurainia pinnata (Walter) Britton. Ruderal—disturbed soil: freq. Stalter, 29 Mar 1990. Stalter 19799, 2008/10.
- Lepidium virginicum L. ssp. virginicum. Ruderal—disturbed soil: freq. Stalter, 14 Jun 1990. Stalter 19798, 2008/10.

Caryophyllaceae

- *Polycarpon tetraphyllum (L.) L. Ruderal—lawns and disturbed sites: rare. Stalter, 14 Jun 1990.
- Sagina decumbens (Ell.) Torrey & A. Gray. Ruderal—pavement cracks and waste places: infreq. Stalter, 29 Mar 1990.
- *Stellaria media (L.) Vill. Ruderal—lawn and disturbed soil: freq. Stalter, 29 Mar 1990. Stalter 19599, 2008/10.

Convolvulaceae

- Dichondra carolinensis Michx. Ruderal—lawn: rare, only one population seen adjacent to casemate wall. Stalter, 26 Oct 1990. Stalter 19858, 2008/10.
- Ipomoea lacunosa L. Dunes: freq. Stalter, 14 Jun 1990. Stalter 19860, 2008/10.

Euphorbiaceae

- Croton glandulosus var. septentrionalis (L.) Müll. Arg. Ruderal—disturbed soil: freq. Stalter, 26 Oct 1990. Stalter 20284, 2008/10.
- Croton punctatus Jacq. Dunes: infreq. Stalter, 26 Oct 1990. Stalter 19859, 2008/10.
- Euphorbia maculata L. [=Chamaesyce maculata (L.) Small]. Ruderal—lawns, and disturbed sites: freq. Stalter, 14 Jun 1990; 26 Oct. Stalter 202161, 2008/10.
- Euphorbia polygonifolia L. [=Chamaesyce polygonifolia (L.) Small]. Dunes—upper beach: freq. Stalter, 14 Jun 1990. Stalter 20162, 2008/10.

Fabaceae

- *Medicago arabica (L.) Huds. Ruderal—disturbed soil: freq. Stalter 19596, 2008/10.
- *Medicago polymorpha L. Ruderal—lawns: infreq. Stalter 19597, 2008/10.

- *Melilotus albus Medik. Ruderal—disburbed soil: infreq. Stalter, 14
- Jun 1990. Stalter 19598, 2008/10. **Melilotus officinalis* (L.) Pallas. Dunes: infreq. Stalter, 29 Mar 1990; 14 Jun 1990.
- Strophostyles helvola (L.) Ell. Dunes: infreq. Stalter, 26 Oct 1990.

Vicia sativa L. ssp. nigra (L.) Ehrh. Ruderal—disturbed soil: infreq. Stalter, 29 Mar 1990. Stalter 19797, 2008/10.

Geraniaceae

Geranium carolinianum L. Ruderal—lawn and disturbed soil: infreq. Stalter, 29 Mar 1990. Stalter 21163, 2008/10.

Lamiaceae

*Lamium amplexicaule L. var. amplexicaule. Ruderal—lawns and disturbed soil: freq. Stalter, 29 Mar 1990. Stalter 19600, 2008/10.

Malvaceae

Modiola caroliniana (L.) G. Don. Ruderal—seen only at border between lawn and fort: rare. Stalter, 29 Mar 1990. Stalter 20164, 2008/10.

Onagraceae

- *Oenothera drummondii* Hook. ssp. *drummondii*. Dunes: freq. but rare in the Carolinas (Radford et al. 1968). Stalter, 29 Mar 1990. Stalter 20165, 2008/10.
- Oenothera laciniata Hill. Dunes: freq. Stalter, 29 Mar 1990. Stalter 20168, 2008/10.

Oxalidaceae

Oxalis dillenii Jacq. Ruderal—disturbed soil: infreq. Stalter, 29 Mar 1990. Stalter 20167, 2008/10.

Phytolaccaeae

Phytolacca americana L. Ruderal—disturbed soil and dune: infreq. Stalter, 14 Jun 1990. Stalter 19601, 2008/10.

Plantaginaceae

- Nuttallanthus canadensis (L.) D.A. Sutton [=Linaria canadensis (L.) Dum. Cors.]. Ruderal—disturbed soil and dune: freq. Stalter, 29 Mar 1990. Stalter 20285, 2008/10.
- *Plantago lanceolata L. Ruderal—disturbed soil and lawn: freq. Stalter, 29 Mar 1990. Stalter 20286, 2008/10.
- *Veronica arvensis L. Ruderal—lawns and disturbed soil: freq. Stalter, 29 Mar 1990. Stalter 19602, 2008/10.
- Veronica peregrina L. Ruderal—disturbed soil: infreq. Stalter, 29 Mar 1990. Stalter 19603, 2008/10.

Polygonaceae

*Rumex crispus L. ssp. crispus. Ruderal—disturbed soil: rare. Stalter, 29 Mar 1990. Stalter 19795, 2008/10.

Portulacaceae

*Portulaca pilosa L. Ruderal—lawns and disturbed soil: infreq. Stalter, 14 Jun 1990. Stalter 20169, 2008/10.

Rubiaceae

Diodia teres Walter. Ruderal—disturbed sands: freq. Stalter, 14 Jun 1990. Stalter 20287, 2008/10.

LILIOPSIDA (MONOCOTS)

Agavaceae

*Yucca aloifolia L. Dunes: infreq. Stalter, 29 Mar 1990. Stalter 19566, 2008/10.

Cyperaceae

- Cyperus compressus L. Dunes: rare. Stalter 20270, 2008/10.
- Cyperus croceus Vahl. [=C. globulosus Aubl.]. Dunes: rare. Stalter 20271, 2008/10.
- Cyperus grayi Torr. Dunes: rare. Stalter 20272, 2008/10.

Iridaceae

Sisyrinchium rosulatum Bickn. Ruderal—lawn: infreq. Stalter 19570, 2008/10.

Poaceae

- *Bromus catharticus Vahl. var. cartharticus [=B. wildenowii Kunth.]. Ruderal—disturbed soil: rare, Stalter, 29 Mar 1990.
- Cenchrus longispinus (Hack.) Fernald. Dunes: infreq. Stalter, 14 Jun 1990. Stalter 20273, 2008/10.
- Cenchrus tribuloides L. Dunes: freq. Stalter, 14 Jun 1990. Stalter 20274, 2008/10.
- *Cynodon dactylon (L.) Pers. Ruderal—lawn: freq. Stalter, 29 Mar 1990; 14 Jun 1990. Stalter 19791, 2008/10.
- *Digitaria sanguinalis (L.) Scop. Ruderal—lawn and disturbed soil: freq. Stalter, 14 Jun 1990. Stalter 19792, 2008/10.
- *Eleusine indica (L.) Gaertn. Ruderal—lawn and disturbed soil: infreq. Stalter, 29 Mar 1990. Stalter 20275, 2008/10.
- Eustachys petraea (Sw.) Desv. [=Chloris petraea Sw.]. Ruderal—lawn and disturbed soil: rare. Stalter, 29 Mar 1990.
- *Lolium perenne L. var. aristatum. Ruderal—lawn: infreq. Stalter, 14 Jun 1990. Stalter 19793, 2008/10.
- Panicum amarum Ell. Dunes: freq. Stalter, 26 Oct 1990. Stalter 19794, 2008/10.
- *Paspalum dilatatum Poir. ssp. dilatatum. Ruderal—disturbed soil outside fort: freq. Stalter, 14 Jun 1990. Stalter 20277, 2008/10.
- Paspalum notatum Flügge. Ruderal—disturbed soil outside fort: freq. Stalter, 14 Jun 1990. Stalter 20278, 2008/10.
- *Poa annua L. Ruderal—lawn: freq. Stalter, 29 Mar 1990. Stalter 19572, 2008/10.
- Spartina alterniflora Loisel. Salt Marsh: freq. Stalter, 26 Oct 1990. Stalter 19789, 2008/10.
- Spartina patens (Ait.) Muhl. Dunes: freq. Stalter, 14 Jun 1990. Stalter 19790, 2008/10.
- *Sporobolus junceus (P. Beauv.) Kunth. [=S. poiretii (Roem. & Schult.) Hitchc.]. Ruderal—lawns and disturbed soil: freq. Stalter, 26 Oct 1990. Stalter 20279, 2008/10.
- Triplasis purpurea (Walter) Chapm. var. purpurea. Dunes: freq. Stalter, 26 Oct 1990. Stalter 19788, 2008/10.
- Uniola paniculata L. Dunes: freq. Stalter, 26 Oct 1990. Stalter 19787, 2008/10.
- Vulpia octoflora (Walter) Rydb. var. octoflora [=Festuca octoflora Walter]. Ruderal—lawn and disturbed soil: infreq. Stalter, 14 Jun 1990. Stalter 20276, 2008/10.

ACKNOWLEDGMENTS

The authors thank Bill Dorance, Fort Sumter/Fort Moultrie National Monument for hospitality during our visits and assistance with boat transportation to and from Fort Sumter and many other details; Gordon Tucker and Jim Montgomery for determinations of the Cyperaceae and Pteridophytes; undergraduate research students at St. John's University for assistance in processing voucher material. This paper was improved thanks to the helpful comments and editorial suggestions of three anonymous reviewers and suggestions from Barney Lipscomb.

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